

PMC-ND
(1.08.09.13)

**U.S. DEPARTMENT OF ENERGY
OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY
NEPA DETERMINATION**



RECIPIENT: Elevate Energy

STATE: IL

PROJECT TITLE: Chicago Energy Efficiency Planning and Analysis, and Integrated Retrofit Strategy Validation in Single Family Homes

Funding Opportunity Announcement Number	Procurement Instrument Number	NEPA Control Number	CID Number
DE-FOA-0002099	DE-EE0009077	GFO-0009077-002	G09077

Based on my review of the information concerning the proposed action, as NEPA Compliance Officer (authorized under DOE Policy 451.1), I have made the following determination:

CX, EA, EIS APPENDIX AND NUMBER:

Description:

- A9 Information gathering, analysis, and dissemination** Information gathering (including, but not limited to, literature surveys, inventories, site visits, and audits), data analysis (including, but not limited to, computer modeling), document preparation (including, but not limited to, conceptual design, feasibility studies, and analytical energy supply and demand studies), and information dissemination (including, but not limited to, document publication and distribution, and classroom training and informational programs), but not including site characterization or environmental monitoring. (See also B3.1 of appendix B to this subpart.)
- B5.1 Actions to conserve energy or water** (a) Actions to conserve energy or water, demonstrate potential energy or water conservation, and promote energy efficiency that would not have the potential to cause significant changes in the indoor or outdoor concentrations of potentially harmful substances. These actions may involve financial and technical assistance to individuals (such as builders, owners, consultants, manufacturers, and designers), organizations (such as utilities), and governments (such as state, local, and tribal). Covered actions include, but are not limited to weatherization (such as insulation and replacing windows and doors); programmed lowering of thermostat settings; placement of timers on hot water heaters; installation or replacement of energy efficient lighting, low-flow plumbing fixtures (such as faucets, toilets, and showerheads), heating, ventilation, and air conditioning systems, and appliances; installation of drip-irrigation systems; improvements in generator efficiency and appliance efficiency ratings; efficiency improvements for vehicles and transportation (such as fleet changeout); power storage (such as flywheels and batteries, generally less than 10 megawatt equivalent); transportation management systems (such as traffic signal control systems, car navigation, speed cameras, and automatic plate number recognition); development of energy-efficient manufacturing, industrial, or building practices; and small-scale energy efficiency and conservation research and development and small-scale pilot projects. Covered actions include building renovations or new structures, provided that they occur in a previously disturbed or developed area. Covered actions could involve commercial, residential, agricultural, academic, institutional, or industrial sectors. Covered actions do not include rulemakings, standard-settings, or proposed DOE legislation, except for those actions listed in B5.1(b) of this appendix. (b) Covered actions include rulemakings that establish energy conservation standards for consumer products and industrial equipment, provided that the actions would not: (1) have the potential to cause a significant change in manufacturing infrastructure (such as construction of new manufacturing plants with considerable associated ground disturbance); (2) involve significant unresolved conflicts concerning alternative uses of available resources (such as rare or limited raw materials); (3) have the potential to result in a significant increase in the disposal of materials posing significant risks to human health and the environment (such as RCRA hazardous wastes); or (4) have the potential to cause a significant increase in energy consumption in a state or region.
- B5.16 Solar photovoltaic systems** The installation, modification, operation, and removal of commercially available solar photovoltaic systems located on a building or other structure (such as rooftop, parking lot or facility, and mounted to signage, lighting, gates, or fences), or if located on land, generally comprising less than 10 acres within a previously disturbed or developed area. Covered actions would be in accordance with applicable requirements (such as local land use and zoning requirements) in the proposed project area and would incorporate appropriate control technologies and best management practices.

Rationale for determination:

The U.S. Department of Energy (DOE) is proposing to provide federal funding to Elevate Energy (Elevate) to develop a Chicago residential energy retrofit strategy aligned with City priorities for energy efficiency, energy affordability, resiliency, equity and transparency. With the National Renewable Energy Laboratory (NREL) as a partner, Elevate would characterize the housing stock and energy use characteristics using modeling to then develop energy retrofit packages suitable for field validation in single family homes. The project would be completed over three Budget Periods (BPs), with a Go/No-Go Decision Point in between each BP. BP1 activities were previously reviewed by GFO-0009077-001 (A9, A11; 04/29/2020). This NEPA review is for the remaining project activities in BP2 and BP3.

BP2 and BP3 activities include field validation of advanced retrofit packages; improvement of modeling, visualization, and documentation; development of case studies; and final reporting. Field validation activities would include installation of energy efficiency and renewable energy measures to demonstrate energy and emissions savings in single-family homes in Chicago. An initial energy audit/assessment would be completed before a retrofit package is installed. Retrofit packages could include air sealing and insulating, window upgrades, higher-efficiency upgrades to existing equipment (e.g. HVAC, water heater, appliances), LED lighting, and/or evaluation of solar photovoltaic potential (including solar PV installation). Monitoring equipment would be installed to monitor energy consumption and other relevant parameters during a 6-month performance period.

From an initial list of single-family homes, pre-selection criteria would be used to choose a subset of homes where work would be completed. All homes being considered are older in age and therefore could have historical significance. Elevate is working with the Illinois State Historic Preservation Office (SHPO) to determine if any of the homes on the initial list are historically significant (i.e. is included in or eligible for inclusion in the National Register of Historic Places). If locations with historical significance are chosen for installation of a retrofit package, authorization of federal funds for those installations may be subject to additional Section 106 (National Historic Preservation Act) review and consultation between the DOE and the Illinois SHPO. Installation activities at historically significant locations would follow all guidelines and requirements, as determined by the Illinois SHPO and/or DOE, to complete project activities at those locations.

Due to the nature of the project, there could be lead or asbestos materials on-site. In the event such materials are discovered on-site, work would not proceed until lead and/or asbestos abatement or encapsulation is completed and, if necessary, disposed of in accordance with Federal, state, and/or local regulations. All project locations would require City of Chicago buildings permits to ensure compliance with minimum standards of safety established by the Chicago Building Code in order to protect public health, safety, and welfare.

With implementation of the above safety and selection measures, DOE does not anticipate any impacts to resources of concern due to the remaining activities of the project in BP2 and BP3.

NEPA PROVISION

DOE has made a final NEPA determination.

Include the following condition in the financial assistance agreement:

Task 6 (Installation of Advanced Energy Retrofit Packages) activities are prohibited unless and until the following conditions have been met:

- (1) The Recipient works with the Illinois SHPO to determine the historical significance of project locations;
- (2) For all selected locations determined to have historical significance, the Recipient provides a list of these locations and a description of the specific work proposed to occur at these locations to the DOE NEPA Compliance Officer at GONEPA@ee.doe.gov;
- (3) If DOE determines it necessary, DOE completes Section 106 (National Historic Preservation Act) consultations for the applicable project locations; and
- (4) The Recipient receives written authorization from the DOE to move forward with the activities stated above occurring at historically significant locations.

Notes:

Building Technologies Office

This NEPA determination requires a tailored NEPA provision.

FOR CATEGORICAL EXCLUSION DETERMINATIONS

The proposed action (or the part of the proposal defined in the Rationale above) fits within a class of actions that is listed in Appendix A or B to 10 CFR Part 1021, Subpart D. To fit within the classes of actions listed in 10 CFR Part 1021, Subpart D, Appendix B, a proposal must be one that would not: (1) threaten a violation of applicable statutory, regulatory, or permit requirements for environment, safety, and health, or similar requirements of DOE or Executive Orders; (2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities (including incinerators), but the proposal may include categorically excluded waste storage, disposal, recovery, or treatment actions or facilities; (3) disturb hazardous

substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that preexist in the environment such that there would be uncontrolled or unpermitted releases; (4) have the potential to cause significant impacts on environmentally sensitive resources, including, but not limited to, those listed in paragraph B(4) of 10 CFR Part 1021, Subpart D, Appendix B; (5) involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, unless the proposed activity would be contained or confined in a manner designed and operated to prevent unauthorized release into the environment and conducted in accordance with applicable requirements, such as those listed in paragraph B(5) of 10 CFR Part 1021, Subpart D, Appendix B.

There are no extraordinary circumstances related to the proposed action that may affect the significance of the environmental effects of the proposal.

The proposed action has not been segmented to meet the definition of a categorical exclusion. This proposal is not connected to other actions with potentially significant impacts (40 CFR 1508.25(a)(1)), is not related to other actions with individually insignificant but cumulatively significant impacts (40 CFR 1508.27(b)(7)), and is not precluded by 40 CFR 1506.1 or 10 CFR 1021.211 concerning limitations on actions during preparation of an environmental impact statement.

The proposed action is categorically excluded from further NEPA review.

SIGNATURE OF THIS MEMORANDUM CONSTITUTES A RECORD OF THIS DECISION.

NEPA Compliance Officer Signature:



Electronically Signed By: Casey Strickland

NEPA Compliance Officer

Date:

4/13/2021

FIELD OFFICE MANAGER DETERMINATION

- ☒ Field Office Manager review not required
☐ Field Office Manager review required

BASED ON MY REVIEW I CONCUR WITH THE DETERMINATION OF THE NCO :

Field Office Manager's Signature:

Field Office Manager

Date: